

ED602CS~ED606CS

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 200 to 600 Volts **CURRENT** 6.0 Amperes

FEATURES

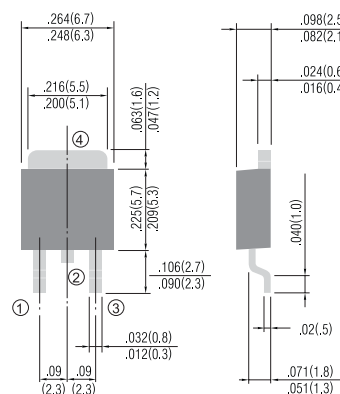
- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded plastic, TO-252
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.

TO-252

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ED602CS	ED603CS	ED604CS	ED606CS	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	200	300	400	600	V
Maximum Average Forward Current at T _C =75°C	I _{F(AV)}	6.0				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	75				A
Maximum Forward Voltage at 3.0A (Note 1)	V _F	0.95	1.3		1.7	V
Maximum DC Reverse Current T _J =25 °C at Rated DC Blocking Voltage T _J =100 °C	I _R	1.0 300				μA
Maximum Reverse Recovery Time (Note 2)	t _{rr}	35				ns
Typical thermal Resistance (Note 3)	R _{θJC}	9.0				°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +150				°C

NOTES:

1. Pulse Test with PW=300 usec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
3. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

ED602CS~ED606CS

RATING AND CHARACTERISTIC CURVES

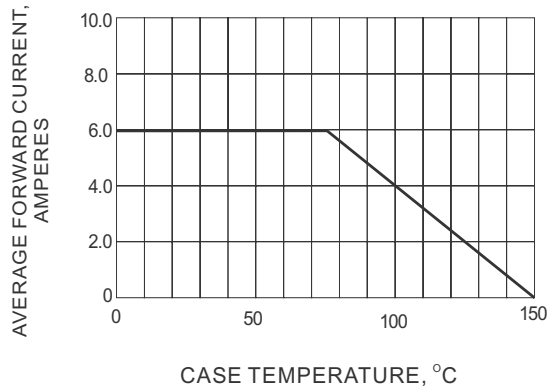


Fig. 1- FORWARD CURRENT DERATING CURVE

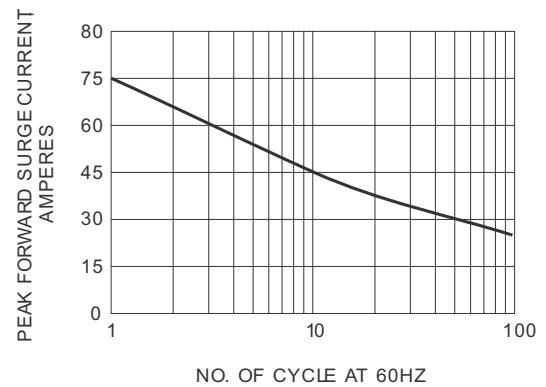


Fig. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

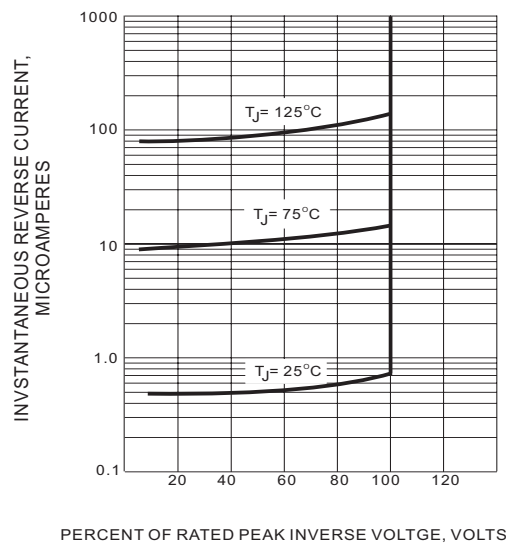


Fig. 3- TYPICAL REVERSE CHARACTERISTICS

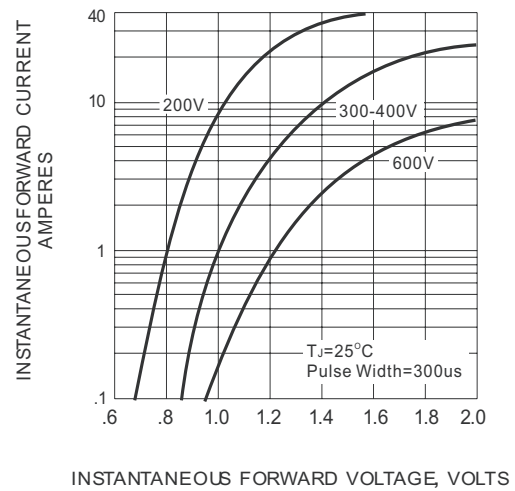
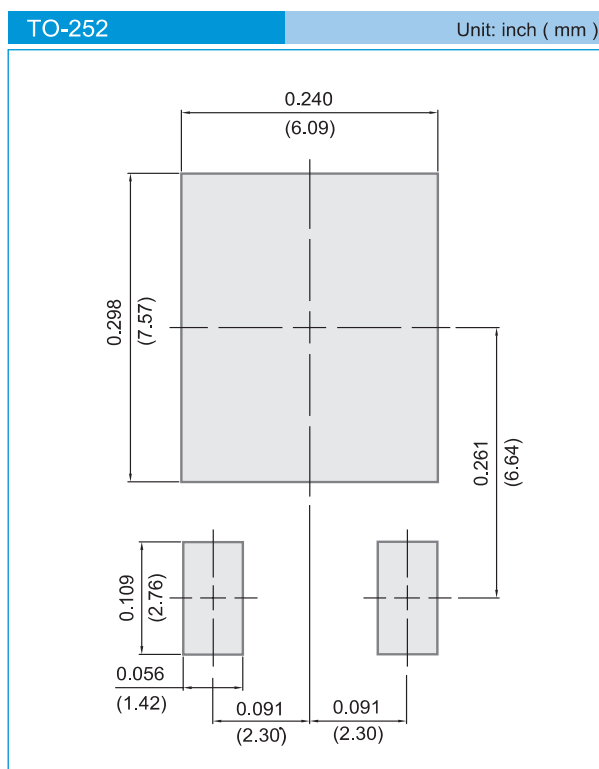


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

ED602CS~ED606CS

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 3K per 13" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.